EX PARTE OR LATE FILED

Electronic Industries Association

December 6, 1995

Mr. William F. Caton
Acting Secretary and Deputy Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Mail Stop 1100
Washington, DC 20554

Re: V-Chip
Re: Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service
MM Docket No. 87-268

Dear Mr. Caton:

Mr. Gary Shapiro and Mr. Joe Peck met with Commissioner Hundt's office and Commissioner Chong's office on Wednesday, December 6, 1995, to discuss the above-referenced issues. Information discussed is attached.

In accordance with Section 1.1206 of the Commission's rules we are enclosing an original and one copy of this letter for placement in the file.

Respectfully submitted,

Joe P. Peck
Staff Director, Congressional Affairs
Consumer Electronics Manufacturers Association

Attachment

2500 Wilson Boulevard • Arlington, Virginia 22201-3834 • (703) 907-7500 • FAX (703) 907-7501

ATV TALKING POINTS

EIA and the ATV Committee urge the Commission to conclude in their pending consideration of the ATV issue as follows:

- HDTV should remain the centerpiece of ATV. HDTV programming is needed to provide consumers with the incentive to transition from today's familiar NTSC service to tomorrow's ATV.

- Licensees should be required to broadcast a reasonable minimum amount of HDTV programming on their ATV channels. Such an obligation can be imposed without unduly burdening broadcasters or restricting their operating flexibility.

- Cable television will be key to the success of ATV. The Commission should confirm that the must-carry obligations of cable operators extend to both ATV and NTSC broadcasting. The Commission should also require cable operators to support the ATV standard adopted for over-the-air broadcasting.

- The Commission should not prescribe technical standards for television receivers. The marketplace can be safely relied upon to provide consumers with a rich variety of affordable television receivers capable of receiving multiple combinations of NTSC, SDTV and HDTV, as well as digital converters capable of supporting all present and future NTSC receivers. The marketplace can also be relied upon to inform consumers of their equipment options.

- Broadcasters should not be permitted to restrict competition in the consumer electronics marketplace through collective action.

- Initial eligibility to obtain ATV channels should be limited to existing broadcasters and they should be given the opportunity to do so without cost. If broadcasters use their spectrum for other than free, over-the-air TV programming, these broadcasters should be assessed spectrum fees (to the extent the Commission has the authority to do so).

- Broadcasters should be subject to date-certain ATV application and construction deadlines, giving due regard to the special circumstances of non-commercial broadcasters and broadcasters operating in small markets.

- The Commission should not decide now when to terminate NTSC broadcasting. The Commission, however, can productively address the kinds of factors that should be considered at a later point in the transition to ATV, including the number of households that remain exclusively dependent on terrestrial NTSC broadcasting, the availability of low-cost digital converters, and the amount of ATV programming available.

- The Commission should promptly recover as much contiguous television spectrum as possible. Toward this end, the Commission should make clear that NTSC spectrum is on "loan" to broadcasters pending the transition to ATV. The Commission should also consider economic incentives, as well as regulatory mechanisms, to speed the recovery and reallocation of this spectrum for new and innovative services.

V-CHIP FACTS

* There is currently no such piece of technology as the so-called V-Chip available to consumers. V-Chip technologies are still under development.

* V-Chip technology does not work without the implementation of a program content ratings system.

* The V-Chip, furthermore, does not work unless the resulting ratings are encoded into programs electronically. Without the code, the technology cannot recognize a program based on content.

* Pending V-Chip legislation does not require program ratings or encoding.

* The EIA continues to work toward establishment of a voluntary industry standard for encoding program content information regarding violence, sex and adult language.

* V-Chip technology will cost manufacturers and consumers real dollars (up to $40 per set to the manufacturer) to install in television receivers. Costs associated with implementation of the feature will generally be inversely proportional to the market price of the television receiver. Thus the V-Chip mandate is a regressive "tax" on consumers.

* Two-thirds of the American households do not contain minor children.

To: William A. Lagoni, Chairman EIA R-4

CC: George Hanover, EIA/CEMA

From: Joseph W. Forler, Interim Chairman EIA R-4.3

Subject: Content Advisory Amendment to ANSI/EIA-608 Standard

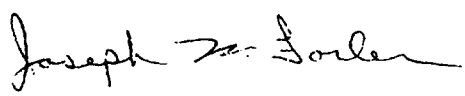
Date: November 13, 1995

At the November 1, 1995 meeting of R-4.3, the final reports from two seperate Line 21 Bandwidth Utilization studies were reviewed. These studies were performed to address the technical concerns raised during the Content Advisory ballot. As a result of these studies, R-4.3 has made editorial changes to the Content Advisory amendment to ANSI/EIA-608. The new version of this amendment is enclosed.

R-4.3 will continue to address recommended practices for the implementation of the Program Rating/Content Advisory XDS packet, in addition to field testing of Content Advisory XDS transmissions.

Based on the above actions, I consider that R-4.3 has met its obligation concerning the balloting of the Content Advisory amendment and request that you submit the amendment to ANSI for general balloting.

Regards,



Joseph W. Forler, Interim Chairman EIA R-4.3

Enclosure: Expanded XDS Program Rating Specification, 11/6/95

05h Program Rating

This packet includes two characters that contain information about the program's MPAA rating and mature-content advisories. The characters are non-ASCII, so bit 6 must always be set high (b6=1). The following chart indicates the contents of the characters:

Character	b6	b5	b4	b3	b2	b1	b0
Rating	1	-	-	a0	r2	r1	r0
Advisory	1	v1	v0	s1	s0	m1	m0

The bit a0 is used to indicate whether or not the content advisory character is used or applies to the program. A value of "1" indicates that the content advisory character does apply and a value of "0" indicates that the character does not apply.

The three bits r0 - r2 are used to encode the MPAA picture rating if used.

r2	r1	r0	Rating
0	0	0	N/A
0	0	1	"G"
0	1	0	"PG"
0	1	1	"PG-13"
1	0	0	"R"
1	0	1	"NC-17"
1	1	0	"X"
1	1	1	Not Rated

A distinction is made between N/A and Not Rated. When all zeros are specified (N/A) it means that motion picture ratings are not applicable to this program (e.g. made for TV movies). When all ones are used (Not Rated) it indicates a motion picture that did not receive a rating for a variety of possible reasons.

Bits b5 - b0 in the second character are used to indicate program's mature-content advisories. This character provides for three categories of mature content, each with four levels. The degree of content increases as the advisory level number increases in any given category. Bits v1 - v0 are used to convey information about any violent content in the program, s1 - s0 are used to provide information regarding any sexual content in the program, and the bits m1 - m0 are used to provide information about any mature content in the program.

v1	v0	Advisory level
0	0	No violent content
0	1	V1
1	0	V2
1	1	V3

s1	s0	Advisory level
0	0	No sexual content
0	1	S1
1	0	S2
1	1	S3

m1	m0	Advisory level
0	0	No mature content
0	1	M1
1	0	M2
1	1	M3

All program content analysis is the function of parties involved in program production or distribution. No precise criteria for establishing content ratings or advisories are given or implied in this section. The characters are provided for the convenience of consumers in the implementation of a parental viewing control system.

The data within this packet should be cleared or updated upon a change of the information contained in the Current Class Program Identification Number and/or Program Name packets.

ADDITIONAL NEW PARAGRAPH FOR SECTION 1.6

The following paragraph should be inserted between the second and third paragraphs of Section 1.6 on Extended Data Services.

As an adjunct to program identification, XDS provides the transport mechanism to identify advisories about mature program content, intended to help consumers make appropriate viewing choices.

EDITS TO SECTION 6.6

6.6.2.5 Program Rating

Bits 0-2 of the first byte of this packet carries information about the MPAA rating of the program while bit 3 indicates whether the second byte carries any relevant information about the program's content. This first byte is included in the Composite 1 packet and can be used to determine whether the second byte should be processed.

The MPAA designations should only be used for programs that have been labeled as such by the MPAA. The N/A (Not Applicable) in the ratings category should be used by all programs that would not normally be rated by the MPAA. The N/R designation would apply only for a motion picture (or version of a motion picture) not rated by the MPAA (Motion Picture Association of America).

The content advisory byte should include the appropriate information for each of the mature-content categories defined. The bits for any category in which there is No Content should be set to zero.

NEW SECTION 8.20

8.20 Viewer Control by XDS Program Rating

Receivers may be designed which act on the XDS Program Rating by informing consumers appropriately or by blocking selected program content. If the receiver is designed with a blocking feature based on the mature-content advisory bits of the XDS Program Rating packet (see Section 6.5.1), the following actions are mandatory.

When the blocking mechanism is triggered in accordance with the content advisory levels selected by the user, the receiver should do all of the following:

- mute the program audio
- render the video black or otherwise indecipherable
- eliminate program-related captions

The receiver must display information relevant to the action taken and may optionally display other XDS data.

EDITS TO SECTION 10.7

10.7.3 XDS Packet Handling Requirements

1. XDS data packets should be transmitted continuously to fill all available bandwidth beyond what is used by captioning and text. Text packets should be delayed if they consume more than 50% of the field 2 bandwidth available after captioning, and retransmitted at a 50% bandwidth rate.

   See annex C for suggested repetition rate algorithms.

2. These packets, if they contain data, might be transmitted every 2 to 4 seconds (high priority):

   Current Class: Composite 1, Composite 2, Length/Time-in-show, Program Title, Rating, Aspect Ratio.
   Channel Information Class: Network Name, Call letter/native channel
   Misc. Class: Impulse Capture
   Public Service Class: NWS Code

   Composite packets provide for a more efficient means of transmitting information than sending their component fields as individual packets. Each packet transmitted has at least four bytes of overhead (Start, Type, End, Checksum). By combining the data of several individual packets together, only one set of overhead bytes are used. If the information for two or more of their component fields is known, these packets may be used. If these packets are used, the individual packets which represent the same information should not be used--except as noted below. If information is to be added to a subsequent field, any prior field for which no information is available must be encoded as nulls as space holders. However, no nulls should be used after the last (right most) field of actual information. In the case of the Composite 1 packet, when the rating packet contains two significant bytes of information the Composite 1 packet should include the correct first byte of the rating packet and the complete Rating Packet should be sent independently at the recommended repetition rate.

(NEW PARAGRAPH)

The rating packet contains information that may be used to control a Parental Control Blocking feature of a television receiver. To prevent undue delay in the receiver's Blocking response time, it is important that this packet take precedence over other packets of equal or lower priority where practical. Therefore, the Rating Packet should be repeated at intervals no greater than 3 seconds unless delayed by captioning. The prioritization of time critical packets should be handled as follows:

Field 2 Captions always take priority.

The Time Of Day packet with a Z bit set can interrupt the transmission of any other XDS packet.

When the elapsed time since the previous transmission of the Rating Packet reaches 3 seconds, the transmission of any XDS packet other than TOD with Z bit set should be interrupted to send the Rating Packet.

When the NWS Code Packet is first received it should be sent out after the XDS packet currently being transmitted. Thereafter, it should be transmitted at a high repetition rate. (This paragraph clarifies the term "immediately" as used in 10.8.4.4.10.)

Any new XDS packets that are defined with a time critical option will have lower priority than the three XDS packets identified above.

3. These packets, if they contain data, might be transmitted every 10 to 30 seconds (medium priority):

   Current Class: Program ID (scheduled start time), Program Type, Audio Services, Caption Services, Program Description 1-8.

(The balance of 10.7.3 unchanged.)

Electronic Industries Association

TECHNICAL REQUIREMENTS AND TELEVISION VIOLENCE: FACT SHEET AND POLICY STATEMENT

Representing the nation's television manufacturers, the Electronic Industries Association (EIA) is concerned about efforts to require every new TV set to allow parenting by remote control. Television manufacturers cannot determine program content and wish only to provide features that consumers demand.

Congress is considering legislation to help parents restrict or limit access to violent programming. To serve consumer needs and avoid unnecessary confusion, EIA believes that certain principles ought to apply to any TV receiver-based proposal:

- The approach taken to empower consumers should be reasonably calculated to **serve the intended purpose**;
- Any TV receiver-based parental control mechanism should:
  - Not be unduly expensive or complicated for **retailers to explain** and **consumers** to **implement**;
  - (Not be **resented**) by the consumers it is meant to serve;
  - **Be voluntary** - a feature to be selected by concerned consumers;
  - **Not be required** on all television models - consumers should not be forced to pay for an unwanted technology, but rather should have a choice.

Based on these principles, EIA **opposes** legislation requiring **mandatory** television circuitry that is both program-based and content-based. Basic **demographic** and **marketplace** facts demonstrate that such a mandatory approach would **be ineffective** and would confuse and impose unnecessary burdens on many consumers.

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Why Mandatory Technical Requirements Would Not be Effective

Legislation pending in Congress would require two types of circuitry in all new TVs of screen size 13" or larger: (1) a **circuit** that blocks programs which carry a common rating code for violent content; and (2) circuitry to lock out specific **time slots, programs and channels**.

Before **mandating** such features, consider that:

- **Two-thirds** of American households do **not** contain children under age 18.
- No violence rating system is in place for television programs. Much of the legislation introduced does not require any program encoding which is necessary to trigger the blocking circuitry.
- Mandating this circuitry would impose new costs on all television sets purchasers.
- Some **220 million** TVs are now in use in America. With 20 million sets sold yearly, it would take ten years to replace these sets **even if** an old set were destroyed for every new one purchased. But in reality, old TV sets usually are kept working in bedrooms, dens, etc. **To watch a show with a violent rating code, the child will only need one set in the household that pre-dates the new requirements.** Thus, it could take a **decade** or more for the proposed mandate to have an appreciable effect.

Mandated technical requirements on all new TVs would be overbroad and could take years before a discernable impact is felt -- even if program providers transmitted the violence rating code which activates the circuitry. **Voluntary** efforts can result in a more targeted and effective solution.

Voluntary Efforts Are A More Effective Approach

Those who care about children's viewing should know:

- Over 20 TV models now on the market offer a **channel blocking** feature that enhances parental options.
- In an EIA industry standard for **Extended Data Services (XDS)**, EIA has reserved space for TV program providers to encode their programs with "program content advisories." If TV programmers begin rating and encoding their programs, manufacturers will offer consumers the option of an XDS-equipped set that responds to such encoding.

- EIA is currently considering a proposed amendment to the XDS standard which would define the program content advisory slots which could be used as a basis for the electronic transmission of program content information.

- Most, or all, TV manufacturers will likely offer models that respond to consumers' desires who do need and want parental control features.

* * * * *

Simply stated, market forces combined with television programming industry sensitivity and parental responsibility will reach the desired goal of reducing children's viewing of TV violence. Mandating costly and confusing new features will not achieve this goal.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Advanced Television Systems and	)	MM Docket No. 87-268
Their Impact Upon the Existing	)	
Television Broadcast Service	)	

COMMENTS OF THE ELECTRONIC INDUSTRIES ASSOCIATION AND THE ADVANCED TELEVISION COMMITTEE

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November 20, 1995

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EXECUTIVE SUMMARY

Although the technological changes identified by the *Notice* are by no means insignificant, they do not warrant a major shift in the Commission's ATV policies. The Commission's decisions in this proceeding should continue to be guided by two overriding principles. First, the Commission's overarching goal should be to promote the ubiquitous availability of HDTV, so that all Americans can enjoy the promised benefits of ATV. Second, once the Commission establishes the necessary regulatory groundwork, it should rely on consumer choice and marketplace forces to the maximum extent feasible to guide the transition to this exciting new technology.

Consistent with these principles, EIA and the ATV Committee urge the Commission to conclude as follows:

- HDTV should remain the centerpiece of ATV. HDTV programming is needed to provide consumers with the incentive to transition from today's familiar NTSC service to tomorrow's ATV.

- Licensees should be required to broadcast a reasonable minimum amount of HDTV programming on their ATV channels. Such an obligation can be imposed without unduly burdening broadcasters or restricting their operating flexibility.

- Cable television will be key to the success of ATV. The Commission should confirm that the must-carry obligations of cable operators extend to both ATV and NTSC broadcasting. The Commission should also require cable operators to support the ATV standard adopted for over-the-air broadcasting.

- The Commission should not prescribe technical standards for television receivers. The marketplace can be safely relied upon to provide consumers with a rich variety of affordable television receivers capable of receiving multiple combinations of NTSC, SDTV and HDTV, as well as digital converters capable of supporting all present and future NTSC receivers. The

marketplace can also be relied upon to inform consumers of their equipment options.

- Broadcasters should not be permitted to restrict competition in the consumer electronics marketplace through collective action.

- Initial eligibility to obtain ATV channels should be limited to existing broadcasters and they should be given the opportunity to do so without cost. If broadcasters use their spectrum for other than free, over-the-air TV programming, these broadcasters should be assessed spectrum fees (to the extent the Commission has the authority to do so).

- Broadcasters should be subject to date-certain ATV application and construction deadlines, giving due regard to the special circumstances of non-commercial broadcasters and broadcasters operating in small markets.

- The Commission should not decide now when to terminate NTSC broadcasting. The Commission, however, can productively address the kinds of factors that should be considered at a later point in the transition to ATV, including the number of households that remain exclusively dependent on terrestrial NTSC broadcasting, the availability of low-cost digital converters, and the amount of ATV programming available.

- The Commission should promptly recover as much contiguous television spectrum as possible. Towards this end, the Commission should make clear that NTSC spectrum is on "loan" to broadcasters pending the transition to ATV. The Commission should also consider economic incentives, as well as regulatory mechanisms, to speed the recovery and reallocation of this spectrum for new and innovative services.

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Their Impact Upon the Existing	)	
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COMMENTS OF THE ELECTRONIC INDUSTRIES ASSOCIATION AND THE ADVANCED TELEVISION COMMITTEE

The Electronic Industries Association ("EIA") and the EIA Advanced Television Committee ("Committee") hereby submit the following comments in response to the Fourth Further Notice of Proposed Rule Making and Third Notice of Inquiry ("*Notice*") which the Commission issued in the above-captioned proceeding on August 9, 1995.[1] In the *Notice*, the Commission has inquired whether recent technological developments in advanced television ("ATV") require changes in the policy decisions that were made in earlier phases of this proceeding.[2]

As set forth more fully below, and notwithstanding the significance of the technological developments identified by the *Notice*, the Commission's decisions in this proceeding should continue to be guided by two principles. First, the Commission's policies should promote the ubiquitous availability of High Definition Television ("HDTV"), so that all

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[1] *See Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, Fourth Further Notice of Proposed Rule Making and Third Notice of Inquiry, MM Docket No. 87-268, FCC 95-315 (released Aug. 9, 1995) [hereinafter "*Notice*"].

[2] *See id.* ¶ 19.

Americans can enjoy the promised benefits of ATV. Second, once the Commission establishes the necessary regulatory groundwork, it should rely on consumer choice and marketplace forces to the maximum extent feasible to dictate the pace at which Americans transition to this exciting new technology.

I. INTRODUCTION

A. Identification And Interest Of EIA And The ATV Committee

EIA is the principal trade association of U.S. electronics manufacturers. The ATV Committee is a committee formed under the auspices of EIA. Although sponsored by EIA, the Committee is not limited to EIA members. Rather, it is composed of a diverse array of organizations, including developers, manufacturers, sellers, and installers of equipment used in the broadcast, cable television, satellite, telecommunications, and consumer electronics industries, as well as providers of video delivery services. A list of the Committee's members is attached to these comments.

One of the Committee's principal goals is to promote dialogue and develop consensus on the many technical and policy questions presented by the introduction of ATV. In this regard, the Committee is committed to ensuring that the transition from today's NTSC environment to tomorrow's world of ATV is as seamless and inexpensive as possible for consumers. Towards this end, the Committee has actively participated in each phase of this rulemaking proceeding.

The comments which follow reflect the consensus views of the Committee's member companies. Individual members, however, may hold different views on a number of

the other issues raised by the *Notice*, and EIA and the Committee fully expect that these members will file their own individual comments.

B. Summary Of Position

In their prior comments in this proceeding, EIA and the Committee have stressed the need for the Commission to act prudently, but expeditiously, to move ATV from the drawing board to reality. Notwithstanding the fact that eight years have elapsed since the Commission initiated this proceeding, the Commission is to be commended for ensuring that the complex issues associated with the implementation of ATV have been fully explored in an orderly and logical sequence. In its most recent *Notice*, the Commission has asked whether technological developments warrant reexamining a number of its past conclusions. Although these developments are by no means insignificant, they do not warrant a major shift in policy. EIA and the Committee therefore urge the Commission to stay the course so that the American public can enjoy the benefits of ATV as soon as possible.

In particular, EIA and the Committee urge the Commission to: maintain HDTV as the centerpiece of ATV; require broadcasters to transmit a minimum, but ever-increasing amount of HDTV programming; afford broadcasters maximum flexibility once they have satisfied their HDTV programming obligations; confirm that the must-carry obligations of cable operators extend to both ATV and NTSC signals; give equipment manufacturers maximum flexibility in meeting consumer demand for ATV and ATV-NTSC hybrid products; prevent broadcasters from restricting competition in the consumer electronics market through collective action; limit initial eligibility to obtain ATV channels to existing broadcasters; impose date-certain application and construction deadlines on ATV licenses; allow ATV to gain consumer

acceptance at its own pace, without an artificial deadline for the termination of NTSC service; and recover as much contiguous television spectrum as promptly as possible.

II. HDTV SHOULD REMAIN THE CENTERPIECE OF ATV

When the Commission initiated this proceeding in 1987, it noted the physical limitations of NTSC service and the possibility of greatly enhancing the visual and audio quality of television through new technologies.[3] As the Commission is well aware, industry has been assiduously working towards that goal. Once implemented, HDTV will create a new, more vibrant and engaging experience for all television viewers. It promises to bring the high quality, pictorial acuteness of the theater to every American home.

During the process of creating an HDTV standard, it has become apparent to all concerned that digital technology will allow broadcasters to multicast several digital Standard Definition Television ("SDTV") signals, as well as a variety of non-video services, within the existing 6 MHz television allocation. The *Notice* inquires whether broadcasters should be required, in light of this development, to provide a minimum amount of HDTV programming or whether they should have the flexibility to offer whatever mix of programming they deem appropriate.[4]

EIA and the Committee submit that there can be but one answer to this question. If ATV is to become the Nation's broadcast television standard for the 21st century, HDTV must

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[3] *See id.* ¶¶ 3, 12 (citing *Advanced Television Systems and Their Impact on the Existing Television Broadcast Service*, Notice of Inquiry, 2 FCC Rcd 5125, 5127 (1987)).

[4] *See Notice* ¶ 23.

be its centerpiece. HDTV will give consumers the greatest incentive to transition from familiar NTSC service to ATV. HDTV programming, after all, will be the principal qualitative difference between today's analog service and tomorrow's digital world. Only HDTV will provide the level of picture detail required for true large screen presentation. In this regard, HDTV programming will respond to the growing consumer demand for home theater-quality video and CD-quality sound. Without a reasonable amount of daily HDTV programming, ATV could be stillborn, notwithstanding its multichannel capacity and its ability to provide consumers with ancillary services.

EIA and the Committee therefore urge the Commission to require ATV licensees to broadcast a reasonable minimum amount of free, over-the-air HDTV programming on their ATV channels.[5] At least some of this HDTV programming should be broadcast in prime time and should include "showcase" programming, such as special feature presentations and high visibility sporting events.[6] Although EIA and the Committee are not insensitive to the costs of producing and transmitting HDTV programming, the availability of meaningful quantities of HDTV programming will be the single most important contributing factor to the success of ATV, as measured by consumer acceptance of ATV and sales of ATV receivers. In the absence of HDTV programming, consumers simply will not purchase ATV receivers.

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[5] Only transmissions coded in 720 or 1080 format (or, when available, a higher quality format) should be considered HDTV programming. EIA and the Committee believe that the degree of pictorial acuteness which these two formats offer are the minimum necessary to attract viewers to HDTV.

[6] *See Notice* ¶ 24.

EIA and the Committee recognize that some broadcasters may argue that no purpose would be served by transmitting HDTV programming until there is a large installed base of ATV receivers.[7] Yet, the industry's experience with color television demonstrates that programming will drive the deployment of ATV. In the nine years following the introduction of color broadcasting, the amount of color programming was quite limited. This limited availability of color programming resulted in very low sales of color television receivers. When broadcasters quadrupled the hours of color programming -- from less than 3,000 in 1964 to over 12,000 in 1968 -- the number of homes with color receivers soared -- from two million to 15 million households.

In the past, the Committee has argued that one way of ensuring an expeditious transition to ATV, in addition to requiring prime time HDTV programming, is to require that an increasing percentage of all programming on the ATV channel be devoted to true HDTV

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[7] The Association for Maximum Service Television, Inc. ("MSTV"), by contrast, has recognized the importance of HDTV programming. On September 15, 1995, the MSTV Board of Directors adopted a resolution which states, in relevant part:

> The MSTV Board reaffirms its goal and commitment to broadcast high-definition television. The Board also reaffirms its goal and commitment to the use by broadcasters of their ATV channels substantially for HDTV. As part of the commitment to HDTV, broadcasters commit to broadcasting a reasonable minimum of high-definition television as determined by FCC rules.

See also Resolution Adopted by Board of Directors of Association for Maximum Service Television, Inc. (Apr. 9, 1995).

programming.[8] EIA and the Committee, however, would be the first to concede that there are other ways of articulating the HDTV programming obligations of ATV licensees. Although the precise formula or measure chosen by the Commission is important, it is not nearly as significant as the requirement that broadcasters be obligated to use their ATV channels for a substantial and ever-increasing amount of HDTV programming.

A minimum HDTV programming requirement need not be administratively burdensome for broadcasters. Limited record keeping requirements can be relied upon to ensure that ATV licensees satisfy their HDTV programming obligations. Broadcasters need only be required to maintain an accurate log of their HDTV programming and to submit that log, in computer readable form, to the Commission on an annual basis. Given the value of ATV spectrum and the public's likely interest in HDTV programming once it becomes available, the Commission will quickly learn whether individual broadcasters have failed to satisfy their HDTV programming responsibilities. In such cases, the Commission can rely on its traditional regulatory tools to deal with meritorious claims.

An HDTV programming requirement also need not unduly restrict a broadcaster's operations. Indeed, EIA and the Committee believe that the rules governing ATV service should be as flexible and unintrusive as possible. One of the principal advantages of digital technology is the flexibility it creates to offer a variety of video and non-video services. Once they have satisfied their HDTV programming obligations, broadcasters should be free to offer the mix of

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[8] More specifically, the Committee envisioned a transition period during which a broadcaster's HDTV programming obligation would start at 30 percent of all programming hours and end at 80 percent of all programming hours. *See* Comments of EIA/ATV Committee, MM Docket No. 87-268, at 11 (July 16, 1992).

video and ancillary services they deem appropriate. This flexibility will enable broadcasters to compete more effectively with other multiservice providers, such as cable television and direct broadcast satellite operators. Moreover, if these ancillary services are offered on a subscription basis, they will provide broadcasters with additional revenue to offset the cost of the transition to ATV.[9]

The Commission should similarly take a flexible approach with respect to the simulcasting of ATV and NTSC programming. Once broadcasters have satisfied their HDTV programming obligations, they will have an economic incentive to ensure that their most popular programming reaches the widest possible audience at the lowest possible cost. This may entail the simulcasting of such programming. What is most important during the early years of the transition to ATV is that broadcasters use their creativity to develop the kinds of programming for ATV channels that will stimulate consumer interest in, and foster the development of, a market for ATV. The broadcasting of unique programming on ATV channels may be necessary to create that stimulus. If unreasonable disparities develop between ATV and NTSC programming and broadcasters no longer appear to be serving the public, the Commission can take appropriate action at that time.

III. THE MUST-CARRY OBLIGATIONS OF CABLE OPERATORS SHOULD EXTEND TO BOTH ATV AND NTSC SIGNALS

In addressing the issues raised by the *Notice*, the Commission should recognize that the success of ATV will require substantial participation by the cable industry. As the

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[9] The Commission, however, should consider spectrum fees for such subscription services. *See infra* § V.

Commission is well aware, a majority of American homes now receive television programming over cable systems. As a consequence, any delay by the cable industry in implementing ATV will necessarily retard the acceptance of ATV by the American public. The Commission should therefore confirm that the cable operators' must-carry obligations extend to both ATV and NTSC broadcasting. More specifically, the Commission should ensure that cable subscribers are able to receive SDTV and HDTV programming as initially broadcast. At the same time, the Commission should ensure that those who remain dependent on NTSC receivers, as well as associated video cassette recorders ("VCRs") and other peripherals, can continue to receive NTSC programming over their cable systems.

Although the simultaneous transmission of NTSC and HDTV programming could result in the retransmission of substantially more broadcast programming than takes place today,[10] such a requirement will serve the public interest. Among other things, such retransmission will demonstrate to NTSC viewers the increasing availability of HDTV programming, without depriving them of NTSC programming. More important, simultaneous transmission will afford consumers the opportunity to experience the qualitative differences between the two formats. Family, friends, and neighbors of "early adopters" will see the tremendous improvements of HDTV over NTSC, and many of them will be moved to acquire ATV equipment, thereby accelerating the transition to ATV. The carriage of multiple SDTV signals on cable systems will also promote ATV deployment. To the extent broadcasters can

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[10] *See Notice* ¶ 82.

deliver more appealing programming over more channels, consumers will have an incentive to tap into that programming by transitioning to ATV receivers.

The must-carry obligations of cable operators with respect to HDTV programming have clearly been addressed by Congress. Section 614(b)(4)(B) of the Communications Act directs the Commission to "ensure cable carriage of such broadcast signals."[11] Indeed, a cable operator's failure to retransmit an HDTV broadcast signal in that format would result in a "material degradation" of that signal in contravention of the Act.[12]

The requirement that cable operators retransmit HDTV programming does not relieve them of their NTSC obligations. Section 614(b)(3)(A) of the Act requires carriage of "the primary video, accompanying audio, and line 21 closed caption transmission" of each local broadcast station carried on a cable system.[13] As the context of the statute makes clear, "primary video" is the video stream or visual event the broadcaster intends its viewers to see.[14] Thus, to the extent that a broadcaster transmits two distinct formats, both are primary video streams. The exception to the must-carry rule -- when one local station's signal is substantially duplicated by another's -- does not alter this assessment.[15] The extent to which broadcasters will transmit the same programs in ATV and NTSC formats is currently unknown and

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[11] 47 U.S.C. § 534(b)(4)(B).

[12] *See id.* § 534(b)(4)(A) ("The signals . . . shall be carried without material degradation.").

[13] *Id.* § 534(b)(3)(A).

[14] "Primary video" stands in contrast to "nonprogram-related material" and certain material in the vertical blanking interval. *Id.* § 534(b)(3)(A).

[15] *See id.* § 534(b)(5).

unknowable. Moreover, since ATV will represent a new, more vibrant viewing experience for America's television audiences, ATV transmissions will be qualitatively different from NTSC transmissions and thus inherently non-duplicative.[16]

EIA and the Committee are not unaware that the cable operators' existing channel line-up will be impacted by this broadening of their must-carry obligations. As the Commission is aware, however, the must-carry/retransmission consent obligations of cable operators are circumscribed by statute.[17] Cable systems with different channel capacities have different obligations, and the obligation of each is capped at a point appropriate to its size.

In addition to cable's must-carry obligations, the *Notice* raises a number of questions regarding the ability of cable systems to deliver ATV signals.[18] EIA and the Committee hope that, as digital cable systems become a reality, cable operators will support the ATV standard ultimately adopted by the Commission for over-the-air broadcasting. Widespread acceptance of a single standard will facilitate the deployment of ATV by minimizing the equipment that consumers will have to lease or buy to enjoy ATV programming. Multiple incompatible or partially compatible standards, by contrast, will dampen consumer enthusiasm for ATV by forcing them to cope with the complexity, confusion and expense of choosing the correct mix of service and equipment.

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[16] As noted above, ATV will only succeed if it offers a substantively different viewing experience and a vastly different array of viewing capabilities. In this regard, the fact that ATV and NTSC cannot be broadcast using the same equipment or received using the same television (unless especially designed to receive both signals) is further evidence that the two formats are not substantially duplicative.

[17] *See* 47 U.S.C. § 534(b)(1).

[18] *See Notice* ¶ 84.